## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

 (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or in vivo-hydrolysable precursors thereof:

wherein:

R1 is an optionally substituted heterocyclyl; and

R<sup>2</sup> are at each occurrence independently is selected from H<sub>1</sub> optionally substituted C<sub>1</sub>.
<sub>8</sub>alkyl, or optionally substituted heterocyclyl; with the provise that R<sup>4</sup> and R<sup>2</sup> are not both H;
or R<sup>4</sup> and R<sup>2</sup> and the N to which they are attached in combination form an optionally substituted heterocyclyl:

R<sup>4</sup> is selected from H, OH, optionally substituted carbocyclyl, optionally substituted heterocyclyl, or optionally substituted C<sub>1.4</sub>alkyl;

 $R^5$  is selected from H, optionally substituted carbocyclyl, or optionally substituted  $C_{1,e}$ alkyl.

- 2. (Canceled)
- 3. (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an in vivo-hydrolysable precursor thereof as recited in claim 1 wherein R<sup>2</sup>, R<sup>4</sup>, and R<sup>5</sup> have any of the meanings defined in claim 1 and R<sup>1</sup> is an optionally substituted heterocyclyl wherein 1,2, or 3 substitutents substituents is/are independently selected from halogen, nitro, amino, cyano, trifluoromethyl, alkyl, alkenyl, alkynyl, haloalkyl, alkoxy, hydroxy, alkylhydroxy, carbonyl, -CH(OH)CH<sub>3</sub>, -CH<sub>2</sub>NH-alkyl-OH, alkyl-(OH)CH<sub>3</sub>, -CH<sub>2</sub>-phenyl-(OCH<sub>3</sub>)<sub>Z</sub>, -Oalkyl, -OCH<sub>3</sub>,

10/568,380 March 7, 2008 September 10, 2007

-Ophenyl, -OCOalkyl, -NHCHO, -Nalkyl, -N-(alkyl)-CHO, -NH-CO-amino, -N-(alkyl)-CO-amino, -NH-COalkyl, -N-(alkyl)-COalkyl, -carboxy, -amidino, -CO-amino, -CO-alkyl, -CO $_2$ alkyl, mercapto, -Salkyl, -SCH $_2$ furanyl, -SO(alkyl), -SO $_2$ calkyl), -SO $_2$ -amino, -alkylsulfonylamino, phenyl, anisole, dimethoxyphenyl, trimethoxyphenyl, halophenyl, cycloalkyl, heterocyclyl, -alkyl-NH-cycloalkyl, -alkyl-NH- heterocyclyl, -alkyl-NH-alkyl-OH, -C(=O)OC(CH $_3$ ) $_3$ , -N(CH $_3$ ) $_2$ , -N(CH $_2$ CH $_3$ ) $_2$ , -alkyl-NH-alkyl- heterocyclyl, -alkyl-aryl, -methyl-phenyl, alkyl-polycyclyl, alkyl-amino, alkyl-hydroxy, -CH $_2$ NH-alkyl-heterocyclyl, -CH $_2$ NHCH2CH(CH $_3$ ) $_2$ , vicinal -O(alkyl)O-, vicinal -OC(haloalkyl)O-, vicinal -S(alkyl)S- and -O(alkyl)S-.

- 4. (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an in vivo-hydrolysable precursor thereof as recited in claim 1 wherein R<sup>2</sup>, R<sup>4</sup>, and R<sup>5</sup> have any of the meanings defined in claim 1 and R<sup>1</sup> is an optionally substituted heterocyclyl wherein 1,2, or 3 substitutents substituents is/are independently selected from: -OH, C(=O)OC(CH<sub>3</sub>)<sub>3</sub>, NH<sub>2</sub>, C<sub>1,68</sub>|kyl, methoxybenzene, or dimethoxy benezene.
- (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an in vivo-hydrolysable precursor thereof as recited in claim 1 wherein R<sup>2</sup>, R<sup>4</sup>, and R<sup>5</sup> have any of the meanings defined in claim 1 and

R¹ is a heterocyclyl wherein heterocyclyl is selected from piperdinyl, pyridinyl, pyrrolidinyl, pyrazinyl, azepanyl, azetidinyl, azabicyclozinyl, furanyl, thienyl.

 (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an in vivo-hydrolysable precursor thereof as recited in claim 1 wherein R<sup>1</sup>, R<sup>4</sup>, and R<sup>5</sup> have any of the meanings defined in claim 1 and

R2 is H.

 (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an in vivo-hydrolysable precursor thereof as recited in claim 1 wherein R<sup>1</sup>, R<sup>2</sup>, and R<sup>5</sup> have any of the meanings defined in claim 1 and

R4 is H.

 (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an in vivo-hydrolysable precursor thereof as recited in claim 1 wherein R<sup>1</sup>, R<sup>2</sup>, and R<sup>4</sup> have any of the meanings defined in claim 1 and Application No.
Amendment Dated
Reply to Office Action of

10/568,380 March 7, 2008 September 10, 2007

R<sup>5</sup> is H or an optionally substituted C<sub>1-6</sub>alkyl.

 (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an in vivo-hydrolysable precursor thereof as recited in claim 1 wherein R<sup>1</sup>, R<sup>2</sup>, and R<sup>4</sup> have any of the meanings defined in claim 1 and

R<sup>5</sup> is H or an optionally substituted C<sub>1-6</sub>alkyl wherein 1,2 or 3 substitutents <u>substituents</u> is/are independently selected from: NH<sub>2</sub>, NHCH<sub>3</sub>, N(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>, N(CH<sub>3</sub>)<sub>2</sub>, OCH3, OH, -C<sub>1-6</sub>alkyl, morpholino, piperidinyl, pyrrolodinyl.

10. (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an *in vivo*-hydrolysable precursor thereof as recited in claim 1 wherein R<sup>1</sup>, R<sup>2</sup>, and R<sup>4</sup> have any of the meanings defined in claim 1 and

R5 is H or an optionally substituted C1-3alkyl.

11. (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an *in vivo*-hydrolysable precursor thereof as recited in claim 1 wherein R<sup>1</sup>, R<sup>2</sup>, and R<sup>4</sup> have any of the meanings defined in claim 1 and

R<sup>5</sup> is H or an optionally substituted C<sub>1-3</sub>alkyl wherein 1,2 or 3 <del>substitutents</del> <u>substituents</u> is/are independently selected from: NH<sub>2</sub>, NHCH<sub>3</sub>, N(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>, N(CH<sub>3</sub>)<sub>2</sub>, OCH3, OH, -C<sub>1-6</sub>alkyl, morpholino, piperidinyl, pyrrolodinyl.

12. (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an *in vivo*-hydrolysable precursor thereof, as recited in claim 1 wherein:

R4-is-an optionally substituted heterocyclyl;

R² is H;

R⁴is H;

R5 is H or an optionally substituted C1-6alkyl.

 (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an in vivo-hydrolysable precursor thereof, as recited in claim 1 wherein:

R<sup>1</sup> is an optionally substituted heterocyclyl wherein the substitutent substitutent is selected from one or more of the following: -NH<sub>2</sub>, C<sub>1-6</sub>alkyl, -C(=0)OC(CH<sub>3</sub>)<sub>3</sub>,

R2 is H:

Application No. Amendment Dated Reply to Office Action of September 10, 2007

10/568.380 March 7, 2008

R4 is H:

R5 is H or an optionally substituted C1-6alkyl wherein the substitutent substituent is selected from one or more of the following: -C1-6alkyl, -N(C1-3alkyl)2.

14. (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an in vivo-hydrolysable precursor thereof, as recited in claim 1 wherein:

R<sup>1</sup> is an optionally substituted heterocyclyl wherein the substitutent substitutent is selected from one or more of the following: -NH2, C1-6alkyl, -C(=O)OC(CH3)3,

R2 is H:

R4 is H:

R<sup>5</sup> is H or an optionally substituted C<sub>1-3</sub>alkyl wherein 1.2 or 3 substitutents substituents is/are independently selected from: NH2, NHCH3, N(CH2CH3)2, N(CH3)2, OCH3, OH, -C1.6alkyl, morpholino, piperidinyl, pyrrolodinyl.

15. (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an in vivo-hydrolysable precursor thereof, as recited in claim 1 wherein:

R1 is a heterocyclyl:

R2 is H:

R4 is H1

R5 is H or a C₁salkvl.

16. (Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt or an in vivo-hydrolysable precursor thereof, as recited in claim 1 wherein:

R<sup>1</sup> is a 6-membered heterocyclyl containing at least one N in the ring;

R2 is H1

R4 is H:

R5 is a C1-3alkyl.

17. (Withdrawn and Currently Amended) A compound of formula (I) or a pharmaceutically-acceptable salt thereof, as recited in claim 1 selected from: tert-butyl 3-{[(2-[(aminocarbonyl)amino]-5-{4-[2-(diethylamino)ethoxylphenyl}-3thienyl)carbonyllamino)piperidine-1-carboxylate:

2-[(aminocarbonyl)amino]-5-{4-[2-(diethylamino)ethoxy]phenyl}-N-piperidin-3-ylthiophene-3carboxamide:

Application No. Amendment Dated Amendment Dated March 7, 2008
Reply to Office Action of September 10, 2007

10/568.380 March 7, 2008

- 2-[(aminocarbonyl)amino]-5-{3-[2-(diethylamino)ethoxylphenyl}-N-piperidin-3-ylthiophene-3carboxamide:
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(3S)-piperidin-3-yl]thiophene-3-carboxamide: tert-butyl 3-{[(2-[(aminocarbonyl)amino]-5-{3-[2-(diethylamino)ethoxy]phenyl}-3-

thienvl)carbonvl]amino}piperidine-1-carboxvlate:

- 2-[(aminocarbonyl)amino]-5-{4-[2-(diethylamino)ethoxy]phenyl}-N-piperidin-4-ylthiophene-3carboxamide:
- 2-[(aminocarbonyl)amino]-N-[(3R)-azepan-3-yl]-5-(4-methoxyphenyl)thiophene-3-carboxamide;
- N-(3-[(4-aminopiperidin-1-vl)carbonvl]-5-{4-[2-(diethylamino)ethoxylphenvl}-2-thienyl)urea:
- 2-[(aminocarbonyl)amino]-5-{4-[2-(diethylamino)ethoxy]phenyl}-N-[3-

(hydroxymethyl)phenyl]thiophene-3-carboxamide:

- 2-[(aminocarbonyl)amino]-5-{3-[2-(diethylamino)ethoxylphenyl}-N-piperidin-4-ylthiophene-3carboxamide;
- 2-I(aminocarbonyl)aminol-N-(2-aminoethyl)-5-(4-methoxyphenyl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-piperidin-4-ylthiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-5-{3-[2-(diethylamino)ethoxy]phenyl}-N-pyridin-3-ylthiophene-3carboxamide:
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(1-methylpiperidin-4-yl)thiophene-3carboxamide:
- 2-[(aminocarbonyl)aminol-5-(4-methoxyphenyl)-N-[(3S)-1-methylazepan-3-yl]thiophene-3carboxamide:
- 2-[(aminocarbonyl)amino]-5-{3-[2-(diethylamino)ethoxy]phenyl}-N-[3-
- (hydroxymethyl)phenyllthiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-5-{4-[2-(diethylamino)ethoxy]phenyl}-N-pyrrolidin-3-ylthiophene-3carboxamide:
- 2-[(aminocarbonyl)amino]-5-{4-[2-(diethylamino)ethoxy]phenyl}-N-pyridin-3-ylthiophene-3carboxamide:
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(3S)-1-methylpiperidin-3-yl]thiophene-3carboxamide:
- 2-[(aminocarbonyl)amino]-5-{3-[2-(diethylamino)ethoxy]phenyl}-N-pyrrolidin-3-ylthiophene-3carboxamide:
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(3R)-piperidin-3-ylmethyl]thiophene-3carboxamide:
- 2-f(aminocarbonyl)aminol-5-(4-methoxyphenyl)-N-f(3S)-pyrrolidin-3-yllthiophene-3-carboxamide:

10/568,380 March 7, 2008 September 10, 2007

- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(3R)-pyrrolidin-3-yl]thiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-N-[2-(dimethylamino)ethyl]-5-(4-methoxyphenyl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-N-[2-(diethylamino)ethyl]-5-(4-methoxyphenyl)thiophene-3carboxamide:
- 2-I(aminocarbonyl)aminol-N-I(3S)-azepan-3-yll-5-(4-methoxyphenyl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(3R)-piperidin-3-yl]thiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(piperidin-4-ylmethyl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-pyrrolidin-3-ylthiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-N-(1-ethylpiperidin-3-yl)-5-(4-methoxyphenyl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-N-[(3S)-1-ethylazepan-3-yl]-5-(4-methoxyphenyl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-5-(3-hydroxyphenyl)-N-piperidin-4-ylthiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-N-piperidin-4-ylthiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-5-(3-methoxyphenyl)-N-piperidin-4-ylthiophene-3-carboxamide; tert-butyl (3S)-3-([[2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-3-

thienyl]carbonyl}amino)pyrrolidine-1-carboxylate;

- 2-[(aminocarbonyl)aminol-5-(4-methoxyphenyl)-N-piperidin-3-ylthiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-N-(1-benzylpiperidin-4-yl)-5-(4-methoxyphenyl)thiophene-3-carboxamide;

tert-butyl 3-({[2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-3-

thienyl]carbonyl}amino)piperidine-1-carboxylate;

- 2-[(aminocarbonyl)amino]-5-[4-(2-piperidin-1-ylethoxy)phenyl]-N-(2-pyridin-4-ylethyl)thiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-5-[4-(2-piperidin-1-ylethoxy)phenyl]-N-(2-pyridin-4-ylethyl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)aminol-N-azetidin-3-yl-5-(4-methoxyphenyl)thiophene-3-carboxamide:
- 2-{(aminocarbonyl)amino}-5-(4-methoxyphenyl)-N-[(2S)-pyrrolidin-2-ylmethyl]thiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-pyridin-4-ylthiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(2-piperazin-1-ylethyl)thiophene-3carboxamide:

Application No. Amendment Dated Reply to Office Action of 10/568,380 March 7, 2008 September 10, 2007

- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(2-piperidin-1-ylethyl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-N-1-azabicyclo[2.2.2]oct-3-yl-5-(4-methoxyphenyl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-N-(2-hydroxyethyl)-5-(4-hydroxyphenyl)thiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-N-(trans-4-hydroxycyclohexyl)-5-(4-methoxyphenyl)thiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-N-(2-pyridin-4-ylethyl)thiophene-3-carboxamide;
- $\hbox{2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(2-piperazin-1-ylethyl)thiophene-3-piperazin-1-ylethyl)}\\$

carboxamide:

- 2-[(aminocarbonyl)aminol-5-(4-methoxyphenyl)-N-(2-pyridin-4-ylethyl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)aminol-5-(4-hydroxyphenyl)-N-(2-pyridin-3-ylethyl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(2-pyridin-3-ylethyl)thiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(2,2,6,6-tetramethylpiperidin-4-yl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-5-(2-methoxyphenyl)-N-piperidin-4-ylthiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(tetrahydrofuran-2-ylmethyl)thiophene-3-carboxamide:

tert-butyl (3R)-3-({[2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-3-

thienvilcarbonvilamino)piperidine-1-carboxvlate:

- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(pyridin-3-ylmethyl)thiophene-3-carboxamide; tert-butyl 3-({[2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-3-thienyl]carbonyl}amino)azetidine-1-carboxylate:
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(pyridin-4-ylmethyl)thiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino] 5-(4-methoxyphenyl) N-(3-methoxypropyl)thiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[2-(2-thienyl)ethyl]thiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(2-thienylmethyl)thiophene-3-carboxamide;
- N-[3-(1,4-diazepan-1-ylcarbonyl)-5-(4-methoxyphenyl)-2-thienyl]urea;
- 2-I(aminocarbonyl)aminol-N-(2-methoxyethyl)-5-(4-methoxyphenyl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-N-(2-thienylmethyl)thiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-N-{2-[(2-furylmethyl)thio]ethyl}-5-(4-methoxyphenyl)thiophene-3-carboxamide:
- 2-{(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-N-[2-(2-thienyl)ethyl]thiophene-3-carboxamide; N-(3-{(4-aminopiperidin-1-vl)carbonyl|-5-(3-{1/2-(diethylamino)ethoxylphenyl)-2-thienyl)urea:

Application No. Amendment Dated Reply to Office Action of September 10, 2007

10/568.380 March 7, 2008

- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(3R)-piperidin-3-ylmethyl]thiophene-3carboxamide:
- 2-[(aminocarbonyl)aminol-5-(4-methoxyphenyl)-N-(1,2,3,4-tetrahydroquinolin-3-yl)thiophene-3carboxamide:
- 2-I(aminocarbonyl)aminol-N-(1,3-benzodioxol-5-ylmethyl)-5-(4-methoxyphenyl)thiophene-3carboxamide:
- 2-[(aminocarbonyl)amino] N-(3-methoxybenzyl)-5-(4-methoxyphenyl)thiophene-3-carboxamide;
- 2-I(aminocarbonyl)amino1 N-I2-(3.4-dimethoxyphenyl)ethyll-5 (4-methoxyphenyl)thiophene-3carboxamide:
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(5-methyl-2-furyl)methyl]thiophene-3carboxamide:
- 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(pyridin-2-ylmethyl)thiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-N-(4-fluorobenzyl)-5-(4-methoxyphenyl)thiophene-3-carboxamide; tert-butyl 4-({[2-[(aminocarbonyl)aminol-5-(3-methoxyphenyl)-3-

thienvilcarbonvilamino)piperidine-1-carboxvlate:

- 2-[(aminocarbonyl)amino]-N-(2-methoxybenzyl)-5-(4-methoxyphenyl)thiophene-3-carboxamide;
- 2-I(aminocarbonyl)amino1-5-(4-methoxyphenyl)-N-(2-phenoxyethyl)thiophene-3-carboxamide:
- 2-[(aminocarbonyl)aminol-5-(4-methoxyphenyl)-N-(2-pyridin-2-ylethyl)thiophene-3-carboxamide; tert-butyl 4-({[2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-3-

thienvilcarbonvilamino)piperidine-1-carboxvlate:

- 2-[(aminocarbonyl)amino]-N-(4-methoxybenzyl)-5-(4-methoxyphenyl)thiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-5-{4-[2-(diethylamino)ethoxy]phenyl}-N-[(3S)-piperidin-3-yl]thiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-5-{4-[2-(diethylamino)ethoxylphenyl}-N-[(3R)-piperidin-3-yl]thiophene-3-carboxamide:
- tert-butyl (3S)-3-{[(2-[(aminocarbonyl)amino]-5-{4-[2-(diethylamino)ethoxy]phenyl}-3thienyl)carbonyl]amino}piperidine-1-carboxylate;
- 2-[(aminocarbonyl)amino]-N-[(3S)-azepan-3-yl]-5-[4-[2-(diethylamino)ethoxy]phenyl}thiophene-3carboxamide:
- tert-butyl (3R)-3-{[(2-[(aminocarbonyl)amino]-5-{4-[2-(diethylamino)ethoxy]phenyl}-3thienvl)carbonvl]amino}piperidine-1-carboxvlate:
- N-[3-{[(3S)-3-aminoazepan-1-v]]carbonyl}-5-(4-methoxyphenyl)-2-thienyl]urea:
- 5-{4-[2-(diethylamino)ethoxy]phenyl}-2-{[(pyrazin-2-ylamino)carbonyl]amino}-N-[(3S)-pyrrolidin-3vl1thiophene-3-carboxamide:

10/568,380 March 7, 2008 September 10, 2007

- 5-{3-[2-(diethylamino)ethoxy]phenyl}-2-{[(pyrazin-2-ylamino)carbonyl]amino}-N-{(3S)-pyrrolidin-3-yllthiophene-3-carboxamide;
- 5-{3-[2-(diethylamino)ethoxylphenyl}-N-piperidin-4-yl-2-{[(pyrazin-2-

ylamino)carbonyl]amino}thiophene-3-carboxamide;

N-[(3S)-azepan-3-yl]-5-(4-methoxyphenyl)-2-[([pyrazin-2-ylamino)carbonyl]amino)thiophene-3-carboxamide:

5-{3-[2-(diethylamino)ethoxy]phenyl}-N-piperidin-3-yl-2-{[(pyrazin-2-

ylamino)carbonyl]amino}thiophene-3-carboxamide;

N-(2-aminoethyl)-5-(4-methoxyphenyl)-2-{[[(pyrazin-2-ylamino)carbonyl]amino}thiophene-3-carboxamide;

5-{4-[2-(diethylamino)ethoxy]phenyl}-N-piperidin-3-yl-2-{[(pyrazin-2-

ylamino)carbonyl]amino}thiophene-3-carboxamide;

5-(4-methoxyphenyl)-N-piperidin-4-yl-2-{[(pyrazin-2-ylamino)carbonyl]amino}thiophene-3-carboxamide:

tert-butyl 3-{[(5-{3-[2-(diethylamino)ethoxy]phenyl}-2-{[(pyrazin-2-ylamino)carbonyl]amino}-3-thienyl)carbonyl]amino}piperidine-1-carboxylate;

5-{4-[2-(diethylamino)ethoxy]phenyl}-N-piperidin-4-yl-2-{[(pyrazin-2-

vlamino)carbonyl]amino}thiophene-3-carboxamide;

5-(4-methoxyphenyl)-2-[[(pyrazin-2-ylamino)carbonyl]amino}-N-[(3S)-pyrrolidin-3-yl]thiophene-3-carboxamide:

N-[3-(1,4-diazepan-1-ylcarbonyl)-5-(4-methoxyphenyl)-2-thienyl]-N'-pyrazin-2-ylurea;

N-[3-[(3-aminopyrrolidin-1-yl)carbonyl]-5-(4-methoxyphenyl)-2-thienyl]-N'-pyrazin-2-ylurea;

tert-butyl 4-{[(5-(4-methoxyphenyl)-2-{[(pyrazin-2-vlamino)carbonyl]amino}-3-

thienyl)carbonyl]amino)piperidine-1-carboxylate:

tert-butyl 3-{[(5-{4-[2-(diethylamino)ethoxy]phenyl}-2-{[(pyrazin-2-ylamino)carbonyl]amino}-3-thienyl)carbonyl]amino}piperidine-1-carboxylate;

5-[4-(2-diethylamino-ethoxy)-phenyl]-2-(3-hydroxy-urea)-thiophene-3-carboxylic acid-(S)-piperidin-3-ylamide;

- 2-[(aminocarbonyl)amino]-N-[(3S)-azepan-3-yl]-5-(3-methoxyphenyl)thiophene-3-carboxamide;
- 2-[(aminocarbonyl)amino]-5-(2-hydroxyphenyl)-N-[(3S)-piperidin-3-yl]thiophene-3-carboxamide;
- 2-f(aminocarbonyl)aminol-5-(3-methoxyphenyl)-N-f(3S)-piperidin-3-yllthiophene-3-carboxamide:
- 2-[(aminocarbonyl)amino]-5-[2-(benzyloxy)phenyl]-N-[(3S)-piperidin-3-yl]thiophene-3-carboxamide.

Application No. Amendment Dated Reply to Office Action of September 10, 2007

10/568.380 March 7, 2008

18. (Canceled)

19. (Canceled)

- 20. (Withdrawn) A method for the treatment of cancer comprising administering to a human a therapeutically effective amount of a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in claim 1.
- 21. (Withdrawn) A method for the treatment of breast cancer, colorectal cancer, ovarian cancer. lung (non small cell) cancer, malignant brain tumors, sarcomas, melanoma and lymphoma by administering a compound of formula I or a pharmaceutically acceptable salt thereof as defined in claim 1.
- 22. (Withdrawn) A method of treating cancer by administering to a human a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in claim 1 and an anti-tumor agent.
- 23. (Withdrawn) A method of treating cancer by administering to a human a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in claim 1 and a DNA damaging agent.
- 24. (Withdrawn) A method for the treatment of infections associated with cancer comprising administering to a host in need of such treatment a therapeutically effective amount of a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in claim 1.
- 25. (Withdrawn) A method for the prophylaxis treatment of infections associated with cancer comprising administering to a host in need of such treatment a therapeutically effective amount of a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in claim 1.
- 26. (Withdrawn and Currently Amended) A pharmaceutical composition comprising a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in claim 1 together with at least one pharmaceutically acceptable carrier, diluent or excipent excipient.

- 27. (Withdrawn) A process for the preparation of a compound of formula (I) or a phrmaceutically acceptable salt or *in vivo*-hydrolysable precursors thereof as defined in claim 1, which comprises:
- (a) the reaction of a 2-aminothiophene shown below as Formula II

wherein the hydrogen at the 2-amino position is displaced to form an amide, shown as formula III below

wherein the methyl ester is converted to an amide utilizing the desired amine in conjuntion with an aluminate organometallic complex, to give the product shown as formula IV below:

Wherein the amide is converted to various substituted secondary ureas by the reaction with various isocyanantes to yield the product shown as fromula V below:

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28. (Canceled)